# Mathletics New Brunswick Outcomes Alignment with Mathletics 

Supported by independent evidence-based research and practice.


Grades K - 8

# New Brunswick Outcomes <br> Alignment with Mathletics 

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## New Brunswick Outcomes <br> Alignment with Mathletics

## Mathletics and the New Brunswick Outcomes

The education team at Mathletics is committed to providing a resource that is powerful, targeted, and, most importantly, relevant to all students.

Mathletics includes well over 1200 individual adaptive practice activities and eBooks available for all grades. Our team of educational publishers has created a course that specifically follows the New Brunswick outcomes. You can be assured that students have access to relevant and targeted content.

Strands, substrands, and learning outcomes are supported with activities, each with pre and post assessment. What's more, Mathletics contains an extensive library of eBooks-for use on screen or as a printable resource-that are also mapped to the requirements of the New Brunswick outcomes.

This document outlines this mapping and acts as a useful guide when using Mathletics in your school.


Engage


Target


Diagnose


Assess


Repor $\dagger$


Fluency


Mobile

## New Brunswick Outcomes <br> Alignment with Mathletics

## Kindergarten

| Strand | General Curriculum Outcome | Specific Curriculum Outcome | Outcome Description | \# Activities | eBooks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number | Number | NB.K.N. 1 | Say the number sequence by 1s, starting anywhere from 1 to 10 and from 10 to 1. | Count to 5 Order Numbers to 10 How Many? | Kindergarten <br> Numbers and Patterns |
| Number | Number | NB.K.N. 2 | Recognize at a glance and name familiar arrangements of 1 to 5 objects or dots. | How Many? <br> How many dots? | Kindergarten Numbers and Patterns |
| Number | Number | NB.K.N. 3 | Relate a numeral, 1 to 10 , to its respective quantity. | How Many? <br> Who has the Goods? <br> How many dots? <br> Balancing Act | Kindergarten Numbers and Patterns |
| Number | Number | NB.K.N. 4 | Represent and describe numbers 2 to 10 in two parts, concretely and pictorially. | How Many? | Kindergarten Numbers and Patterns |
| Number | Number | NB.K.N. 5 | Compare quantities, 1 to 10 , using one-to-one correspondence. | How Many? <br> More or Less? <br> How many dots? <br> More, Less or the Same to 10 | Kindergarten Numbers and Patterns |
| Patterns and Relations | Patterns | NB.K.PR. 1 | Demonstrate an understanding of repeating patterns (two or three elements) by: identifying, reproducing, extending, creating patterns using manipulatives, sounds and actions. | Complete the Pattern Missing It! Colour Patterns Simple Patterns | Kindergarten Numbers and Patterns |
| Shape and Space | Measurement | MB.K.SS. 1 | Use direct comparison to compare two objects based on a single attribute, such as length (height), mass (weight), and volume (capacity). | Everyday Mass <br> How Heavy? <br> Which Holds More? <br> Filling Fast! <br> Balancing Act Same and Different Everyday Length | Kindergarten Measurement |
| Shape and Space | 3-D Objects and 2-D Shapes | NB.K.SS. 2 | Sort 3-D objects using a single attribute | Collect the Objects Collect the Objects 1 | Kindergarten Space and Shape |
| Shape and Space | 3-D Objects and 2-D Shapes | NB.K.SS. 3 | Build and describe 3-D objects | Collect the Objects Collect the Objects 1 Match the Solid 1 Match the Solid 2 Match the Object | Kindergarten Space and Shape |

## New Brunswick Outcomes <br> Alignment with Mathletics

## Grade 1

| Strand | General Curriculum Outcome | Specific Curriculum Outcome | Outcome Description | \# Activities | $\square \mathrm{eBooks}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number | Number | NB.1.N. 1 | Say the number sequence O to 100, by: 1s forward and backward between any two given numbers; 2s to 20, forward starting at 0; 5s and 10s to 100, forward starting at 0 . | Making Numbers Count <br> Making Big Numbers Count <br> Number Lines <br> Counting by $2 \mathrm{~s}, 5$, and 10 s <br> Counting Backward <br> Counting Forward <br> Going Up <br> Going Down <br> Counting By Twos <br> Counting By Fives <br> Counting By Tens <br> Count by $2 \mathrm{~s}, 5 \mathrm{~s}$ and 10 s <br> 1 to 30 <br> Before, After and Between to 20 <br> Before, After \& Between to 100 <br> Matching Numbers to 20 <br> Matching Numbers to 10 <br> Arranging Numbers <br> Making Teen Numbers <br> Counting Back Within 20 <br> Counting Up to 20 | Grade 1 <br> Numbers |
| Number | Number | NB.1.N. 2 | Recognize at a glance and name familiar arrangements of 1 to 10 objects or dots. | How Many? | Grade 1 <br> Numbers |
| Number | Number | NB.1.N. 3 | Demonstrate an understanding of counting by: indicating that the last number said identifies "how many;" showing that any set has only one count; using the counting on strategy; using parts or equal groups to count sets. | Counting Backward Counting Forward Going Up Going Down Counting By Twos Counting By Fives Counting By Tens 1 to 30 <br> Before, After \& Between to 100 Arranging Numbers Counting Up to 20 Counting Back Within 20 | Grade 1 <br> Numbers |
| Number | Number | NB.1.N. 4 | Represent and describe numbers to 20, concretely, pictorially, and symbolically. | Matching Numbers to 10 <br> Matching Numbers to 20 <br> Arranging Numbers <br> How Many? <br> How many Blocks? <br> Making Numbers Count <br> Number Line Order | Grade 1 <br> Numbers |

## New Brunswick Outcomes <br> Alignment with Mathletics

Grade 1

| Strand | General Curriculum Outcome | Specific Curriculum Outcome | Outcome Description | \# Activities | $\pm$ eBooks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number | Number | NB.1.N. 5 | Compare sets containing up to 20 elements to solve problems using: referents; one-to-one correspondence. | More or Less? <br> Comparing Groups of Objects Order Numbers to 20 <br> Number Line Order Arranging Numbers | Grade 1 Operations with Number |
| Number | Number | NB.1.N. 6 | Estimate quantities to 20 by using referents. | Under review | Grade 1 Operations with Number |
| Number | Number | NB.1.N. 7 | Demonstrate, concretely and pictorially, how a given number can be represented by a variety of equal groups with and without singles. | Making Equal Groups Divide Into Equal Groups Groups Groups of Two Groups of Five Divide Into Equal Groups | Grade 1 Numbers |
| Number | Number | NB.1.N. 8 | Identify the number, up to 20, that is one more, two more, one less, and two less than a given number. | 1 more, 2 less | Grade 1 Numbers |
| Number | Number | NB.1.N. 9 | Demonstrate an understanding of addition of numbers with answers to 20 and their corresponding subtraction facts, concretely, pictorially, and symbolically by: using familiar and mathematical language to describe additive and subtractive actions from their experience; creating and solving problems in context that involve addition and subtraction; modelling addition and subtraction using a variety of concrete and visual representations, and recording the process symbolically. | Addition Facts <br> Addition <br> Model Addition <br> Model Subtraction <br> Subtraction Facts to 18 <br> All about Ten <br> All about Twenty <br> Addictive Addition <br> Simple Subtraction <br> Problems: Add and Subtract <br> Add and Subtract Problems <br> Add and Subtract Using <br> Graphs <br> Adding to 10 Word Problems | Grade 1 Operations with Number |
| Number | Number | NB.1.N. 10 | Describe and use mental mathematics strategies (memorization not intended), such as: counting on and counting back; making 10; doubles; using addition to subtract for the basic addition and subtraction facts to 18. | All about Ten <br> All about Twenty <br> Addictive Addition <br> Simple Subtraction <br> Problems: Add and Subtract <br> Fact Families: Add and <br> Subtract <br> Related Facts 1 <br> 1 more, 2 less <br> Adding to make 5 and 10 <br> Adding to Ten <br> Doubles and Halves to 10 <br> Composing Additions to 20 | Grade 1 Operations with Number |

## New Brunswick Outcomes <br> Alignment with Mathletics

## Grade 1

| Strand | General Curriculum Outcome | Specific Curriculum Outcome | Outcome Description | $\ldots$ Activities | eBooks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Patterns and Relations | Patterns | NB.1.PR. 1 | Demonstrate an understanding of repeating patterns (two to four elements) by: describing; reproducing; extending; creating patterns using manipulatives, diagrams, sounds and actions. | Simple Patterns <br> Missing it! <br> Pattern Error Increasing Patterns Decreasing Patterns Missing Values Colour Patterns Balancing Act | Grade 1 Patterns and Relationships |
| Patterns and Relations | Patterns | NB.1PR. 2 | Translate repeating patterns from one representation to another. | Simple Patterns Pattern Error Increasing Patterns Decreasing Patterns Colour Patterns Balancing Act | Grade 1 <br> Patterns and Relationships |
| Patterns and Relations | Variables and Equations | NB.1.PR. 3 | Describe equality as a balance and inequality as an imbalance, concretely and pictorially (0 to 20). | Balance Numbers to 20 Balancing Act |  |
| Patterns and Relations | Variables and Equations | NB.1.PR. 4 | Record equalities using the equal symbol. | More, less or the same to 10 More, less or the same to 20 | Grade 1 <br> Numbers |
| Shape and Space | Measurement | NB.1.SS. 1 | Demonstrate an understanding of measurement as a process of comparing by: identifying attributes that can be compared; ordering objects; making statements of comparison; filling, covering or matching. | Biggest Shape Filling Fast! Everyday Length | Grade 1 Measurement |
| Shape and Space | 3-D Objects and 2-D Shapes | NB.1.SS. 2 | Sort 3-D objects and 2-D shapes using one attribute, and explain the sorting rule. | Sort it Collect the Shapes Collect the Objects Which Hold More? Collect Simple Shapes | Grade 1 Space and Shape |
| Shape and Space | 3-D Objects and 2-D Shapes | NB.1.SS. 3 | Replicate composite 2-D shapes and 3-D objects. | Sort it Collect the Shapes Collect the Objects | Grade 1 Space and Shape |
| Shape and Space | 3-D Objects and 2-D Shapes | NB.1.SS. 4 | Compare 2-D shapes to parts of 3-D objects in the environment. | Match the Solid 1 Match the Object | Grade 1 Space and Shape |

## New Brunswick Outcomes <br> Alignment with Mathletics

## Grade 2

| Strand | General Curriculum Outcome | Specific Curriculum Outcome | Outcome Description | $\#$ Activities | eBooks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number | Number | NB.2.N. 1 | Say the number sequence from 0 to 100 by: $2 \mathrm{~s}, 5 \mathrm{~s}$ and 10 s , forward and backward, using starting points that are multiples of 2,5 and 10 respectively; 10s using starting points from 1 to 9 ; 2s starting from 1. | Repartition Two-digit <br> Numbers <br> Counting by Twos <br> Counting by Fives <br> Counting by Tens <br> Counting by $2 \mathrm{~s}, 5 \mathrm{~s}$ and 10 s <br> Counting on a 100 grid <br> Going Up <br> Number Line Order <br> Going Down <br> Skip Counting <br> Skip Counting with coins | Grade 2 <br> Numbers |
| Number | Number | NB.2.N. 2 | Demonstrate if a number (up to 100) is even or odd. | Odd and Even Numbers 1 Odd or Even | Grade 2 <br> Numbers Grade 2 Patterns and Relationships |
| Number | Number | NB.2.N. 3 | Describe order or relative position using ordinal numbers (up to tenth). | 1st to 31st Ordinal Numbers | Grade 2 <br> Numbers |
| Number | Number | NB.2.N. 4 | Represent and describe numbers to 100, concretely, pictorially, and symbolically | Reading Numbers to 30 Model Numbers | Grade 2 <br> Numbers |
| Number | Number | NB.2.N. 5 | Compare and order numbers up to 100. | Arranging Numbers <br> Number Line Order <br> Place value 1 <br> Understanding Place Value 1 <br> Greater or Less to 100 <br> Compare numbers to 50 | Grade 2 <br> Numbers |
| Number | Number | NMB.2.N. 6 | Estimate quantities to 100 using referents. | Under Review | Grade 2 Operations with Number |
| Number | Number | NB.2.N. 7 | Illustrate, concretely and pictorially, the meaning of place value for numerals to 100. | Arranging Numbers <br> Number Line Order <br> Number Lines <br> Make Numbers Count <br> Making Numbers Count <br> Making Big Numbers Count <br> Understanding Place Value 1 <br> Repartition Two-digit <br> Numbers <br> Making Equal Groups <br> Place value 1 | Grade 2 <br> Numbers |

## New Brunswick Outcomes <br> Alignment with Mathletics

## Grade 2

| Strand | General Curriculum Outcome | Specific Curriculum Outcome | Outcome Description | \# Activities | $\square$ eBooks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number | Number | NB.2.N. 8 | Demonstrate and explain the effect of adding zero to or subtracting zero from any number. | Concept of zero | Grade 2 <br> Numbers |
| Number | Number | NB.2.N. 9 | Demonstrate an understanding of addition (limited to 1- and 2-digit numerals) with answers to 100 and the corresponding subtraction by: using personal strategies for adding and subtracting; explaining that the order in which numbers are subtracted may affect the difference. | Related Facts 1 <br> Compensation - Add <br> Compensation - Subtract <br> Add Numbers: Regroup a Ten <br> Add 3 Numbers Using Bonds to 10 <br> Adding In Any Order <br> Commutative Property of Addition <br> Doubles and Near Doubles <br> Doubles and Halves to 10 <br> Doubles and Halves to 20 <br> Complements to 10, 20, 50 <br> Addictive Addition <br> Add Three 1-Digit Numbers <br> Model Addition <br> Add Two 2-Digit Numbers <br> Adding to 2-digit numbers <br> Bar model problems 1 <br> Subtract Tens <br> Subtract Numbers <br> Subtract Numbers: Regroup <br> Simple Subtraction <br> Mental Subtraction | Grade 2 <br> Operations with Number |
| Number | Number | NB.2N. 10 | Apply mental mathematics strategies, such as: using doubles; making 10; one more, one less; two more, two less; addition for subtraction to determine basic addition facts to 18 and related subtraction facts. | Related Facts 1 <br> Compensation - Add <br> Compensation - Subtract <br> Add Numbers: Regroup a Ten <br> Add 3 Numbers Using Bonds to 10 <br> Adding In Any Order <br> Commutative Property of Addition <br> Doubles and Near Doubles <br> Doubles and Halves to 10 <br> Doubles and Halves to 20 <br> Repartition to Subtract | Grade 2 <br> Operations with Number |

# New Brunswick Outcomes <br> Alignment with Mathletics 

## Grade 2

| Strand | General Curriculum Outcome | Specific Curriculum Outcome | Outcome Description | \# Activities | $\square \mathrm{a}$ eooks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Patterns and <br> Relations | Patterns | NB.2.PR. 1 | Demonstrate an understanding of repeating patterns (three to five elements) by: describing; extending; comparing; creating patterns using manipulatives, diagrams, sounds and actions. | Simple Patterns <br> Pattern Error Increasing Patterns <br> Describing Patterns <br> Decreasing Patterns <br> Missing Values <br> Colour Patterns <br> Count Backward Patterns <br> Count Forward Patterns | Grade 2 <br> Patterns and Relationships |
| Patterns and <br> Relations | Patterns | NB.2.PR. 2 | Demonstrate an understanding of increasing patterns by: describing; reproducing; extending; creating patterns using manipulatives, diagrams, sounds and actions (numbers to 100). | Count Forward Patterns <br> Simple Patterns <br> Pattern Error <br> Increasing Patterns <br> Colour Patterns | Grade 2 <br> Patterns and Relationships |
| Patterns and <br> Relations | Variables and Equations | NB.2.PR. 3 | Demonstrate and explain the meaning of equality and inequality by using manipulatives and diagrams ( O to 100). | Missing Values Balancing Act | Grade 3 <br> Patterns and Algebra |
| Patterns and <br> Relations | Variables and Equations | NB.2.PR. 4 | Record equalities and inequalities symbolically using the equal symbol or the not equal symbol. | Compare Numbers to 20 <br> Compare Numbers to 50 <br> Compare Numbers to 100 | Grade 2 <br> Numbers |
| Shape and Space | Measurement | NB.2.SS. 1 | Relate the number of days to a week and the number of months to a year in a problem-solving context | Days of the Week Months of the Year Using a Calendar | Grade 2 Time and Monday |
| Shape and Space | Measurement | NB.2.SS. 2 | Relate the size of a unit of measure to the number of units (limited to nonstandard units) used to measure length and mass (weight). | Measuring length with blocks <br> Everyday Length <br> Comparing Length <br> Balancing Act <br> Everyday Mass <br> How Long is That? | Grade 2 <br> Measurement |
| Shape and Space | Measurement | NB.2.SS. 3 | Compare and order objects by length, height, distance around the mass (weight) using non-standard units, and make statements of comparison. | Measuring length with blocks Balancing Act | Grade 2 <br> Measurement |

## New Brunswick Outcomes <br> Alignment with Mathletics

## Grade 2

| Strand | General Curriculum Outcome | Specific Curriculum Outcome | Outcome Description | E Activities | $\square$ eBooks |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Measurement | NB.2.SS. 4 | Measure length to the nearest non-standard unit by: using multiple copies of a unit; using a single copy of a unit (iteration process). | Measuring length with blocks | Grade 2 Measurement |
| Shape and Space | 3-D Objects and 2-D Shapes | NB.2.SS. 5 | Demonstrate that changing the orientation of an object does not alter the measurements of its attributes. | Under review | Under review |
| Shape and Space | 3-D Objects and 2-D Shapes | NB.2.SS. 6 | Sort 2-D shapes and 3-D objects using two attributes, and explain the sorting rule. | Sort It Collect the Shapes Collect the Shapes 1 Collect the Shapes 2 Collect Simple Shapes Collect the Objects Collect the Objects 1 Collect the Objects 2 | Grade 2 Space and Shape |
| Shape and Space | 3-D Objects and 2-D Shapes | NB.2.SS. 7 | Describe, compare, and construct 3-D objects, including: cubes; spheres; cones; cylinders; pyramids. | Sort It Collect the Shapes Collect the Shapes 1 Collect the Shapes 2 Collect Simple Shapes Collect the Objects Collect the Objects 1 Collect the Objects 2 | Grade 2 Space and Shape |
| Shape and Space | 3-D Objects and 2-D Shapes | NB.2.SS. 8 | Describe, compare, and construct 2-D shapes, including: triangles; squares; rectangles; circles. | Sort It <br> Collect the Shapes Collect the Shapes 1 Collect the Shapes 2 Collect Simple Shapes Collect the Objects Collect the Objects 1 Collect the Objects 2 | Grade 2 Space and Shape |
| Shape and Space | 3-D Objects and 2-D Shapes | NB.2.SS. 9 | Identify 2-D shapes as parts of 3-D objects in the environment. | Match the Object <br> Match the Solid 1 <br> Match the Solid 2 <br> Relate Shapes and Solids | Grade 2 Space and Shape |

## New Brunswick Outcomes <br> Alignment with Mathletics

## Grade 2

| Strand | General <br> Curriculum <br> Outcome | Specific <br> Curriculum <br> Outcome | Outcome Description | Activities |  | eBooks |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Statistics <br> and <br> Probability | Data Analysis | NB.2.SP.1 | Gather and record data <br> about self and others to <br> answer questions. | Tallies <br> Making Graphs <br> Sorting Data | Grade 2 <br> Chance and <br> Data |  |
| Statistics <br> and <br> Probability | Data Analysis | NB.2.SP.2 | Construct and interpret <br> concrete graphs and <br> pictographs to solve <br> problems. | Add and Subtract Using <br> Graphs <br> Pictographs | Grade 2 <br> Chance and <br> Data |  |

## New Brunswick Outcomes <br> Alignment with Mathletics

## Grade 3

| Strand | General Curriculum Outcome | Specific Curriculum Outcome | Outcome Description | E Activities | $\pm$ eBooks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number | Number | NB.3.N. 1 | Say the number sequence forward and backward from 0 to 1000 by: $5 \mathrm{~s}, 10 \mathrm{~s}$, or 100s, using any starting point; 3s using starting points that are multiples of 3; 4s using starting points that are multiples of $4 ; 25 \mathrm{~s}$ using starting points that are multiples of 25 . | Counting by Fives <br> Counting by Tens <br> Skip Counting <br> Money <br> Who has the Money? <br> Skip Counting with coins | Grade 2 <br> Numbers |
| Number | Number | NB.3.N. 2 | Represent and describe numbers to 1000, concretely, pictorially, and symbolically. | Model Numbers How many Blocks? | Grade 3 <br> Reading and Understanding Whole Numbers |
| Number | Number | NB.3.N. 3 | Compare and order numbers to 1000. | Which is Bigger? <br> Which is Smaller? <br> Compare Numbers to 100 <br> Ascending Order <br> Descending Order | Grade 3 <br> Reading and Understanding Whole Numbers |
| Number | Number | NB.3.N. 4 | Estimate quantities less than 1000 using referents. | Nearst 10? <br> Nearest 100? |  |
| Number | Number | NB.3.N. 5 | Illustrate, concretely and pictorially, the meaning of place value for numerals to 1000. | How many Blocks? <br> Model Numbers <br> Understanding Place Value 1 <br> Place value 2 | Grade 3 <br> Reading and Understanding Whole Numbers |
| Number | Number | NB.3.N. 6 | Describe and apply mental mathematics strategies for adding two 2-digit numerals. | Add Two 2-Digit Numbers <br> Add Two 2-Digit Numbers: <br> Regroup <br> Addition Facts <br> Complements to 50 and 100 <br> Columns that Add <br> Magic Mental Addition <br> Column Addition <br> Add Numbers: Regroup a Ten <br> Strategies for Column Addition <br> Addition Properties <br> Fact Families: Add and Subtract | Grade 3 Addition and Subtraction |

## New Brunswick Outcomes <br> Alignment with Mathletics

## Grade 3

| Strand | General Curriculum Outcome | Specific Curriculum Outcome | Outcome Description | \# Activities | $\square$ eBooks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number | Number | NB.3.N. 7 | Describe and apply mental mathematics strategies for subtracting two 2-digit numerals. | 2-Digit Differences <br> 2-Digit Differences: Regroup Subtract Numbers: Regroup Subtraction Facts to 18 Subtract Numbers Decompose Numbers to Subtract Columns that Subtract Column Subtraction Magic Mental Subtraction | Grade 3 Addition and Subtraction |
| Number | Number | NB.3.N. 8 | Apply estimation strategies to predict sums and differences of two 2-digit numerals in a problemsolving context. | Estimation: Add and Subtract Estimate Sums Estimate Differences | Grade 3 Addition and Subtraction |
| Number | Number | NB.3.N. 9 | Demonstrate an understanding of addition and subtraction of numbers with answers to 1000 (limited to 1-, 2-, and 3-digit numerals). | Problems: Add and Subtract Word Problems: Add and Subtract | Grade 3 Addition and Subtraction |
| Number | Number | NB.3.N. 10 | Apply mental mathematics strategies and number properties, such as: using doubles; making 10; using the commutative property; using the property of zero; thinking addition for subtraction to determine answers for basic addition facts and related subtraction facts (to 18). | Addition Properties Commutative Property of Addition Fact Families: Add and Subtract Related Facts 1 | Grade 3 <br> Addition and Subtraction |
| Number | Number | NB.3.N. 11 | Demonstrate an understanding of multiplication to $5 \times 5$. | Multiplication Arrays <br> Arrays 1 <br> Arrays 2 <br> Multiplication Facts <br> Model Multiplication to $5 \times 5$ <br> Groups <br> Groups of Two <br> Groups of Five <br> Groups of Four <br> Groups of Three <br> Frog Jump Multiplication | Grade 3 Multiplication and Division |

## New Brunswick Outcomes <br> Alignment with Mathletics

## Grade 3

| Strand | General Curriculum Outcome | Specific Curriculum Outcome | Outcome Description | \# Activities | $\square$ eBooks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number | Number | NB.3.N. 12 | Demonstrate an understanding of division (limited to division related to multiplication facts up to $5 \times 5$. | Fill the Jars Making Equal Groups Divide Into Equal Groups Dividing Twos Dividing Threes Dividing Fours Dividing Fives | Grade 3 Multiplication and Division |
| Number | Number | NB.3.N. 13 | Demonstrate an understanding of fractions by: explaining that a fraction represents a part of a whole; describing situations in which fractions are used; comparing fractions of the same whole with like denominators. | Shape Fractions Model Fractions Compare fractions 1 1a Compare fractions 1b Halves and Quarters Thirds and Sixths Is it half? | Grade 3 <br> Fractions |
| Patterns and Relations | Patterns | NB.3.PR. 1 | Demonstrate an understanding of increasing patterns by: describing, extending, comparing, creating patterns using manipulatives, diagrams, sounds and actions (numbers to 1000). | Simple Patterns Pattern Error Increasing Patterns Colour Patterns Count Forward Patterns Count Backward Patterns Describing Patterns | Grade 3 <br> Patterns and Relationships |
| Patterns and Relations | Patterns | NB.3.PR. 2 | Demonstrate an understanding of decreasing patterns by: describing, extending, comparing, creating patterns using manipulatives, diagrams, sounds and actions (numbers to 1000). | Simple Patterns <br> Pattern Error <br> Decreasing Patterns <br> Colour Patterns <br> Count Backward Patterns | Grade 3 <br> Patterns and Relationships |
| Patterns and Relations | Variables and Equations | NB.3.PR. 3 | Solve one-step addition and subtraction equations involving symbols representing an unknown number. | Word Problems: Add and Subtract <br> Solve Equations: Add, Subtract 1 <br> Word problems with letters Bar model problems 1 Bar model problems 2 Missing Values | Grade 3 <br> Addition and Subtraction |

## New Brunswick Outcomes <br> Alignment with Mathletics

## Grade 3

| Strand | General Curriculum Outcome | Specific Curriculum Outcome | Outcome Description | \# Activities | $\square$ eBooks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Shape and Space | Measurement | NB.3.SS. 1 | Relate the passage of time to common activities using nonstandard and standard units (minutes, hours, days, weeks, months, years). | Days of the Week Months of the Year Hour Times Half Hour Times What is the Time? Time Mentals Elapsed Time What Time Will it Be? Tell Time to the Half Hour Five Minute Times | Grade 3 Time |
| Shape and Space | Measurement | NB.3.SS. 2 | Relate the number of seconds to a minute, the number of minutes to an hour, and the number of days to a month in a problem-solving context. | Using a Calendar | Grade 3 Time |
| Shape and Space | Measurement | NB.3.SS. 3 | Demonstrate an understanding of measuring length ( $\mathrm{cm}, \mathrm{m}$ ) by: selecting and justifying referents for the units cm and m ; modelling and describing the relationship between the units cm and m ; estimating length using referents; measuring and recording length,width and height. | Comparing Length Everyday Length Measuring Length Compare Length Compare Length 1 How Long is That? | Grade 3 Measurement |
| Shape and Space | Measurement | NB.3.SS. 4 | Demonstrate an understanding of measuring mass ( $\mathrm{g}, \mathrm{kg}$ ). | How Heavy? Everyday Mass | Grade 3 Measurement |
| Shape and Space | Measurement | NB.3.SS. 5 | Demonstrate an understanding of perimeter of regular and irregular shapes. | Perimeter of Shapes Perimeter | Grade 3 Measurement |
| Shape and Space | 3-D Objects and 2-D Shapes | NB.3.SS. 6 | Describe 3-D objects according to the shape of the faces, and the number of edges and vertices. | How many Faces? <br> How many Edges? <br> How many Corners? <br> Faces, Edges and Vertices | Grade 3 Space, Shape and Position |
| Shape and Space | 3-D Objects and 2-D Shapes | NB.3.SS. 7 | Sort regular and irregular polygons, including: triangles, quadrilaterals, pentagons, hexagons, octagons, according the number of sides. | Collect the Shapes 2 Collect the Polygons | Grade 3 Space, Shape and Position |

## New Brunswick Outcomes <br> Alignment with Mathletics

## Grade 3

| Strand | General Curriculum Outcome | Specific Curriculum Outcome | Outcome Description | \# Activities | $\square$ eBooks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Statistics and Probability | Data Analysis | NB.3.SP. 1 | Collect first-hand data and organize it using: tally marks, line plots, charts, lists to answer questions. | Sorting Data 1 <br> Tallies <br> Bar Graphs 1 <br> Bar Graphs 2 <br> Interpreting Tables <br> Line Graphs: Interpretation <br> Line Graphs: Reading <br> Line Graphs: Explanation | Grade 3 <br> Chance and Data |
| Statistics and Probability | Data Analysis | NB.3.SP. 1 | Construct, label, and interpret bar graphs to solve problems. | Sorting Data 1 <br> Tallies <br> Bar Graphs 1 <br> Interpreting Tables <br> Line Graphs: Interpretation <br> Line Graphs: Interpretation 1 <br> Bar Graphs 2 | Grade 3 <br> Chance and Data |

## New Brunswick Outcomes <br> Alignment with Mathletics

## Grade 4

| Strand | General Curriculum Outcome | Specific Curriculum Outcome | Outcome Description | A Activities | $\pm$ eBooks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number | Number | NB.4.N. 1 | Represent and describe whole numbers to 10 000, pictorially and symbolically. | Expanded Notation Understanding Place Value 2 Partition and rename 1 <br> Place Value to Thousands <br> Place value 3 <br> Expanding Numbers Numbers from Words to Digits 1 Numbers from Words to Digits 2 | Grade 4 <br> Reading and Understanding Whole Numbers |
| Number | Number | NB.4.N. 2 | Compare and order numbers to 10000. | Greater Than or Less Than? <br> Ascending Order <br> Descending Order <br> Which is Greater? <br> Which is Less? | Grade 4 <br> Patterns and Algebra |
| Number | Number | NB.4.N. 3 | Demonstrate an understanding of addition of numbers with answers to 10000 and their corresponding subtractions (limited to 3- and 4-digit numerals). | Adding Colossal Columns Estimation: Add and Subtract Add Three 2-Digit Numbers Add Three 2-Digit Numbers: Regroup <br> Add 3-Digit Numbers <br> Add 3-Digit Numbers: Regroup <br> Add Multi-Digit Numbers 1 <br> Add Three 3-Digit Numbers: <br> Regroup <br> Subtracting Colossal Columns <br> 3-Digit Differences <br> 3-Digit Differences with Zeros <br> 3-Digit Differences: 1 Regrouping <br> 3-Digit Differences: 2 Regroupings <br> Budgeting <br> Estimate Differences <br> Estimate Sums | Grade 4 Addition and Subtraction |
| Number | Number | NB.4.N. 4 | Explain the properties of $O$ and 1 for multiplication, and the property of 1 for division. | Under review |  |

## New Brunswick Outcomes <br> Alignment with Mathletics

## Grade 4

| Strand | General Curriculum Outcome | Specific Curriculum Outcome | Outcome Description | \# Activities | $\square$ eBooks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number | Number | NB.4.N. 5 | Describe and apply mental mathematics strategies, such as: skip counting from a known fact; using doubling or halving and adding or subtracting one more group; using patterns in the 9s facts; using repeated doubling to determine basic multiplication facts to $9 \times 9$ and related division facts. | Problems: Multiply and Divide Multiply and Divide Problems 1 Word Problems: Multiply and Divide <br> Divisibility Tests <br> Divisibility Tests (2,5,10) <br> Divisibility Tests (3, 4, 9) <br> Double and Halve to Multiply <br> Missing Numbers: $x$ and $\div$ facts <br> Equivalent Facts: Multiply <br> Fact Families: Multiply and <br> Divide <br> Multiplication Grids | Grade 4 Multiplication and Division |
| Number | Number | NB.4.N. 6 | Demonstrate an understanding of multiplication (2- or 3-Digit by 1-Digit) to solve problems. | Multiplication Arrays <br> Arrays 1 <br> Arrays 2 <br> Multiplication Problems 1 <br> Problems: Multiply and Divide <br> Multiply: 1-Digit Number <br> Multiply: 1-Digit Number, <br> Regroup <br> Multiply: 2-Digit by 1-Digit <br> Multiply: 2-Digit Number, <br> Regroup <br> Multiply Multiples of 10 <br> Multiply More Multiples of 10 <br> Multiplication Facts <br> Times Tables <br> Multiplication Properties <br> Multiply 3 single-digit numbers <br> Groups of Six <br> Groups of Seven <br> Groups of Eight <br> Groups of Nine <br> Groups of Ten | Grade 4 Multiplication and Division |

## New Brunswick Outcomes <br> Alignment with Mathletics

## Grade 4

| Strand | General Curriculum Outcome | Specific Curriculum Outcome | Outcome Description | \# Activities | deBooks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number | Number | NB.4.N. 7 | Demonstrate an understanding of division (1-Digit divisor and up to 2-Digit dividend) to solve problems: using personal strategies for dividing with and without concrete materials; estimating quotients; relating division to multiplication. | Division Facts <br> Division Facts 1 <br> Remainders by Arrays <br> Divide: 1-Digit Divisor 1 <br> Divide: 1-Digit Divisor 2 <br> Divide: 1-Digit Divisor, Remainder <br> Estimation: Multiply and Divide <br> Dividing Twos <br> Dividing Threes <br> Dividing Fours <br> Dividing Fives <br> Dividing Sixes <br> Dividing Sevens <br> Dividing Eights <br> Dividing Nines <br> Dividing Tens <br> Short Division <br> Long Division | Grade 4 Multiplication and Division |
| Number | Number | NB.4.N. 8 | Demonstrate an understanding of fractions less than or equal to one by using concrete and pictorial representations to: name and record fractions for the parts of a whole or a set; compare and order fractions; model and explain that for different wholes, two identical fractions may not represent the same quantity; provide examples of where fractions are used. | Partition into Equal Parts <br> Fractions of a Collection <br> Fraction Fruit Sets 1 <br> Equivalent Fraction Wall 1 <br> Counting with Fractions on a <br> Number Line <br> Identifying Fractions on a Number <br> Line <br> What Fraction is Shaded? <br> Equivalent Fractions <br> Compare Fractions 2 <br> Comparing Fractions 1 <br> Ordering Fractions | Grade 4 Fractions |
| Number | Number | NB.4.N. 9 | Describe and represent decimals (tenths and hundredths) concretely, pictorially, and symbolically | Decimals from Words to Digits 1 <br> Decimal Order 1 <br> Decimals on the Number Line <br> Decimal Place Value <br> Comparing Decimals 1 | Grade 4 Fractions |
| Number | Number | NB.4.N. 10 | Relate decimals to fractions (to hundredths). | Decimals to Fractions 1 Decimals to Fractions 2 Fractions to Decimals | Grade 4 <br> Fractions |

## New Brunswick Outcomes <br> Alignment with Mathletics

## Grade 4

| Strand | General Curriculum Outcome | Specific Curriculum Outcome | Outcome Description | \# Activities | eBooks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number | Number | NB.4.N. 11 | Demonstrate an understanding of addition and subtraction of decimals (limited to hundredths) by: using compatible numbers; estimating sums and differences; using mental math strategies to solve problems. | Add Decimals 1 <br> Nearest Whole Number <br> Rounding Decimals 1 <br> Decimal Complements <br> Subtract Decimals 1 | Grade 4 Fractions |
| Patterns and Relations | Patterns | NB.4.PR. 1 | Identify and describe patterns found in tables and charts, including a multiplication chart. | Increasing Patterns Decreasing Patterns Missing it! <br> Pick the Next Number Describing Patterns Pattern Error | Grade 4 Patterns and Algebra |
| Patterns and Relations | Patterns | NB.4.PR. 2 | Reproduce a pattern shown in a table or chart using concrete materials. | Increasing Patterns Decreasing Patterns Missing it! Pick the Next Number Describing Patterns Pattern Error Caroll Diagram | Grade 4 Patterns and Algebra |
| Patterns and Relations | Patterns | NB.4.PR. 3 | Represent and describe patterns and relationships using charts and tables to solve problems. | Increasing Patterns Decreasing Patterns Missing it! Pick the Next Number Describing Patterns Pattern Error Caroll Diagram | Grade 4 <br> Patterns and Algebra |
| Patterns and Relations | Patterns | NB.4.PR. 4 | Identify and explain mathematical relationships using charts and diagrams to solve problems. | Venn Diagram 1 Caroll Diagram | Grade 5 Data Representation |
| Patterns and Relations | Variables and Equations | NB.4.PR. 5 | Express a given problem as an equation in which a symbol is used to represent an unknown number. | Missing Values Missing Values: Decimals Find the Missing Number 1 I am Thinking of a Number! Missing Numbers: Variables | Grade 4 <br> Patterns and Algebra |
| Patterns and Relations | Variables and Equations | NB.4.PR. 6 | Solve one-step equations involving a symbol to represent an unknown number. | Problems: Multiply and Divide 1 Problems: Add and Subtract 2 | Grade 4 Patterns and Algebra |

## New Brunswick Outcomes <br> Alignment with Mathletics

## Grade 4

| Strand | General Curriculum Outcome | Specific Curriculum Outcome | Outcome Description | \# Activities | $\square$ eBooks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Shape and Space | Measurement | NB.4.SS. 1 | Read and record time using digital and analog clocks, including 24-hour clocks. | What is the Time? <br> Time Mentals Elapsed Time 24 Hour Time What Time Will it Be? Hours and Minutes Five Minute Times | Grade 4 Time |
| Shape and Space | Measurement | NB.4.SS. 2 | Read and record calendar dates in a variety of formats. | Using a Calendar | Grade 4 Time |
| Shape and Space | Measurement | NB.4.SS. 3 | Demonstrate an understanding of area of regular and irregular 2-D shapes. | Area of Shapes <br> Equal Areas <br> Area: Squares and Rectangles | Grade 4 Length, Area and Perimeter |
| Shape and Space | 3-D Objects and 2-Shapes | NB.4.SS. 4 | Describe and construct rectangular and triangular prisms. | Area of Shapes <br> Equal Areas <br> Area: Squares and Rectangles | Grade 4 Length, Area and Perimeter |
| Shape and Space | Transformations | NB.4.SS. 5 | Demonstrate an understanding of line of symmetry by: identifying symmetrical 2-D shapes; creating symmetrical 2-D shapes; drawing one or more lines of symmetry in a 2-D shape. | How many Faces? <br> How many Edges? <br> How many Corners? <br> What Prism am I? <br> Faces. Edges and Vertices <br> Faces, Edges and Vertices 1 | Grade 4 Shape, Space and Position |
| Shape and Space | Transformations | NB.4.SS. 6 | Demonstrate an understanding of congruency, concretely and pictorially. | Symmetry Symmetry or Not? | Grade 4 Shape, Space and Position |
| Statistics and Probability | Data Analysis | NB.4.SP. 1 | Demonstrate an understanding of many-to-one correspondence. | Under review | Under review |
| Statistics and Probability | Data Analysis | NB.4.SP. 2 | Construct and interpret pictographs and bar graphs involving many-to-one correspondence to draw conclusions. | Bar Graphs 1 <br> Bar Graphs 2 <br> Pictographs <br> Divided Bar Graphs <br> Reading from a Bar Chart | Grade 4 Chance and Data |

## New Brunswick Outcomes <br> Alignment with Mathletics

## Grade 5

| Strand | General Curriculum Outcome | Specific Curriculum Outcome | Outcome Description | \# Activities | $\pm$ eBooks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number | Number | NB.5.N. 1 | Represent and describe whole numbers to 1000000. | Numbers in Words <br> Numbers from Words to Digits 1 <br> Numbers from Words to Digits 2 <br> Numbers from Words to Digits 3 <br> Place Value to Millions <br> Expanding Numbers <br> Partition and rename 3 <br> Expanded Notation <br> Place Value 1 ( $\times 10$ and $\div 10$ ) <br> Place Value 2 ( $\times 10$ and $\div 10$ ) <br> Place value 3 | Grade 5 <br> Reading and Understanding Whole Numbers |
| Number | Number | NB.5.N. 2 | Use estimation strategies, including: front-end rounding; compensation; compatible numbers in problem solving contexts. | Estimation: Add and Subtract <br> Estimation: Multiply and Divide <br> Estimate Products <br> Estimate Sums <br> Estimate Differences <br> Estimate Quotients <br> Estimate Decimal Differences 1 <br> Estimate Decimal Sums 1 <br> Estimate Decimal Differences 2 <br> Estimate Decimal Sums 2 <br> Nearest 100? <br> Nearest 1000? <br> Nearest Whole Number <br> Rounding Numbers <br> Rounding Numbers for Division | Grade 5 <br> Reading and Understanding Whole Numbers |
| Number | Number | NB.5.N. 3 | Apply mental mathematics strategies and number properties, such as: skip counting from a known fact; using doubling or halving; using patterns in the 9s facts; using repeated doubling or halving to determine answers for basic multiplication facts to 81 and related division facts. | Multiplication Arrays <br> Multiplication Facts <br> Multiplication Properties <br> Mental Methods Multiplication <br> Division Facts <br> Related Facts 2 <br> Arrays 1 <br> Arrays 2 <br> Multiplication Grids <br> Equivalent Facts: Multiply <br> Double and Halve to Multiply <br> Compatible Numbers | Grade 5 Multiplication and Division |

## New Brunswick Outcomes <br> Alignment with Mathletics

## Grade 5

| Strand | General Curriculum Outcome | Specific Curriculum Outcome | Outcome Description | \# Activities | $\square$ eBooks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number | Number | NB.5.N. 4 | Apply mental mathematics strategies for multiplication, such as: annexing then adding zero; halving and doubling; using the distributive property. | Multiplying by 10, 100, 1000 Double and Halve to Multiply Multiplication Properties Mental Methods Multiplication Mental Methods Multiplication 2 Mental Methods Multiplication 3 | Grade 5 Multiplication and Division |
| Number | Number | NB.5.N. 5 | Demonstrate an understanding of multiplication (2-digit by 2-digit) to solve problems. | Multiply: 1-Digit Number <br> Multiply: 1-Digit Number, Regroup <br> Multiply: 2-Digit by 1-Digit <br> Multiply: 2-Digit Number, Regroup <br> Multiply 2 Digits Area Model | Grade 5 Multiplication and Division |
| Number | Number | NB.5.N. 6 | Demonstrate, with and without concrete materials, an understanding of division (3-Digit by 7-Digit) and interpet remainders to solve problems. | Division Facts <br> Mental Methods Division <br> Mental Methods Division 1 <br> Mental Methods Division 2 <br> Divide: 1-Digit Divisor 1 <br> Divide: 1-Digit Divisor 2 <br> Divide: 1-Digit Divisor, Remainder <br> Compatible Numbers <br> Divisibility Tests <br> Tests of Divisibility 1 <br> Divisibility Tests ( $2,5,10$ ) <br> Divisibility Tests $(3,4,9)$ <br> Remainders by Arrays <br> Short Division <br> Divide: 1-Digit Divisor 2 <br> Divide: 1-Digit Divisor, Remainder | Grade 5 Multiplication and Division |
| Number | Number | NB.5.N. 7 | Demonstrate an understanding of fractions by using concrete and pictorial representations to: create sets of equivalent fractions; compare fractions with like and unlike denominators. | Shading Equivalent Fractions <br> Ordering Fractions <br> Simplifying Fractions <br> Comparing Fractions 1 <br> Comparing Fractions 2 <br> Equivalent Fractions <br> Equivalent Fraction Wall 2 <br> Fraction Fruit Sets 2 <br> Equivalent Fractions on a Number <br> Line 2 <br> Fractions of a Collection <br> Fractions of a Collection 1 <br> Fractions of a Collection 2 <br> Fraction Length Models 1 <br> Fraction Length Models 2 <br> Fraction Wall Labelling 1 <br> Fraction Wall Labelling 2 <br> Partition into Equal Parts | Grade 5 <br> Fractions, Decimals and Percentages |

## New Brunswick Outcomes <br> Alignment with Mathletics

## Grade 5

| Strand | General Curriculum Outcome | Specific Curriculum Outcome | Outcome Description | \# Activities | $\square$ eBooks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number | Number | NB.5.N. 8 | Describe and represent decimals (tenths, hundredths, thousandths) concretely, pictorially, and symbolically. | Rounding Decimals <br> Rounding Decimals 1 <br> Rounding Decimals 2 <br> Decimal Complements <br> Decimals on a Number Line <br> Decimals on the Number Line <br> Decimals from Words to Digits 2 <br> Decimal Place Value | Grade 5 <br> Fractions, Decimals and Percentages |
| Number | Number | NB.5.N. 9 | Relate decimals to fractions (to thousandths). | Decimals to Fractions 1 <br> Decimals to Fractions 2 <br> Fractions to Decimals <br> Fractions to Decimals 2 <br> Fraction to Terminating Decimal | Grade 5 <br> Fractions, Decimals and Percentages |
| Number | Number | NB.5.N. 10 | Compare and order decimals (to thousandths). | Comparing Decimals 1 Comparing Decimals 2 Decimal Order Comparing Decimals | Grade 5 Fractions, Decimals and Percentages |
| Number |  | NB.5.N. 11 | Demonstrate an understanding of addition and subtraction of decimals (limited to thousandths). | Subtract Decimals 1 <br> Subtract Decimals 2 <br> Subtracting Decimals <br> Add Decimals 1 <br> Add Decimals 2 <br> Adding and Subtracting Decimals <br> Adding Decimals | Grade 5 <br> Fractions, Decimals and Percentages |
| Patterns and Relations | Patterns | NB.5.PR. 1 | Determine the pattern rule to make predictions about subsequent terms (elements). | Describing Patterns I am Thinking of a Number! Pattern Error | Grade 5 Patterns and Algebra |
| Patterns and Relations | Variables and Equations | NB.5.PR. 2 | Solve problems involving single-variable, one-step equations with wholenumber coefficients and whole-number solutions. | Solve Equations: Add, Subtract 1 <br> Solve Equations: Multiply, Divide 1 <br> Problems: Multiply and Divide 1 <br> Problems: Add and Subtract 1 <br> Find the Missing Number 1 <br> Find the Missing Number 2 <br> Missing Values <br> Missing Numbers <br> Magic Symbols 1 <br> Magic Symbols 2 | Grade 5 Patterns and Algebra |

## New Brunswick Outcomes <br> Alignment with Mathletics

## Grade 5

| Strand | General Curriculum Outcome | Specific Curriculum Outcome | Outcome Description | \# Activities | $\pm$ eBooks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Shape and Space | Measurement | NB.5.SS. 1 | Design and construct different rectangles given either perimeter or area, or both (whole numbers), and draw conclusions. | Perimeter of Shapes <br> Perimeter <br> Perimeter: Squares and Rectangles <br> Perimeter Detectives 1 <br> Perimeter, Area, Dimension Change <br> Equal Areas <br> Areas of Shapes | Grade 5 <br> Length, <br> Perimeter and Area |
| Shape and Space | Measurement | NB.5.SS. 2 | Demonstrate an understanding of measuring length (mm and km). | Converting cm and mm Converting Units of Length Centimetres and Metres Measuring Length | Grade 5 <br> Length, <br> Perimeter and Area |
| Shape and Space | Measurement | NB.5.SS. 3 | Demonstrate an understanding of volume. | Volume: Cuboid 1 <br> Volume: Rectangular Prisms 1 | Grade 5 <br> Volume, Capacity and Mass |
| Shape and Space | Measurement | NB.5.SS. 4 | Demonstrate an understanding of capacity. | Millilitres and Litres Capacity Word Problems | Grade 5 <br> Volume, Capacity and Mass |
| Shape and Space | 3-D Objects and 2-D Shapes | NB.5.SS. 5 | Describe and provide examples of edges and faces of 3-D objects, and sides of 2-D shapes that are: parallel; intersecting; perpendicular; vertical; horizontal. | Faces, Edges and Vertices Faces, Edged and Vertices 1 What Pair of Lines Am I? | Grade 5 Geometry |
| Shape and Space | 3-D Objects and 2-D Shapes | NB.5.SS. 6 | Identify and sort quadrilaterals, including: rectangles; squares; trapezoids; parallelograms; rhombuses according to their attributes. | Collect the Shapes 2 Collect the Objects 2 Collect the Polygons Shapes | Grade 5 Geometry |
| Shape and Space | Transformations | NB.5.SS. 7 | Perform a single transformation (translation, rotation, or reflection) of a 2-D shape )with and without technology), and draw and describe the image. | Transformations Flip, Slide, Turn | Grade 5 Geometry |
| Shape and Space | Transformations | NB.5.SS. 8 | Identify a single transformation including a translation, rotation and reflection of 2-D shapes. | Transformations Flip, Slide, Turn | Grade 5 Geometry |

## New Brunswick Outcomes <br> Alignment with Mathletics

## Grade 5

| Strand | General Curriculum Outcome | Specific Curriculum Outcome | Outcome Description | \# Activities | $\square$ eBooks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Statistics and Probability | Data Analysis | NB.5.SP. 1 | Differentiate between firsthand and second-hand data. | Under Review | Grade 5 Chance and Data |
| Statistics and Probability | Data Analysis | NB.5.SP. 2 | Construct and interpret double bar graphs to draw conclusion. | Bar Graphs 2 Interpreting Tables Analyzing Data | Grade 5 Chance and Data |
| Statistics and Probability | Chance and Uncertainty | NB.5.SP. 3 | Describe the likelihood of a single outcome occurring using words, such as: impossible, possible, certain. | What are the Chances? <br> How many Combinations? <br> Most Likely and Least Likely <br> Possible Outcomes <br> Fair Games | Grade 5 Chance and Data |
| Statistics and Probability | Chance and Uncertainty | NB.5.SP. 4 | Compare the likelihood of two possible outcomes occurring using words, such as: less likely; equally likely; more likely. | What are the Chances? <br> How many Combinations? <br> Most Likely and Least Likely <br> Possible Outcomes <br> Fair Games | Grade 5 Chance and Data |

## New Brunswick Outcomes <br> Alignment with Mathletics

## Grade 6

| Strand | General Curriculum Outcome | Specific Curriculum Outcome | Outcome Description | $\ldots$ Activities | $\square$ eBooks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number | Number | NB.6.N. 1 | Demonstrate an understanding of place value for numbers greater than one million; less than one thousandth. | Place Value to Billions <br> Place value 3 <br> Partition and rename 3 <br> Comparing Numbers <br> Decimal Order 1 <br> Decimal Order 2 <br> Comparing Decimals 2 <br> Understanding Place Value 3 <br> Numbers from Words to Digits 3 <br> Place Value 2 ( $\times 10$ and $\div 10$ ) | Grade 6 <br> Reading and Understanding Whole Numbers |
| Number | Number | NB.6.N. 2 | Solve problems involving large numbers, using technology. | Estimate Decimal Differences 2 <br> Estimate Decimal Sums 2 <br> Estimate Sums <br> Estimate Products <br> Estimate Quotients <br> Estimate Decimal Operations <br> Estimate Differences <br> Multiplying by 10, 100, and 1000 <br> Dividing by 10, 100, 1000 <br> 3-Digit Differences: 2 <br> Regroupings <br> Add Three 3-Digit Numbers: Regroup <br> Multiply 2 Digits Area Model <br> Adding Colossal Columns <br> Subtracting Colossal Columns | Grade 6 <br> Fractions, Decimals and Percentages |
| Number | Number | NB.6.N. 3 | Demonstrate an understanding of factors and multiples by: determining multiples and factors of numbers less than 100 identifying prime and composite numbers; solving problems involving multiples. | Least Common Multiple Multiples Factors Greatest Common Factor Product of Prime Factors Prime or Composite? <br> Prime Factoring <br> Find the Factor | Grade 7 Whole Numbers |
| Number | Number | NB.6.N. 4 | Relate improper fractions to mixed numbers. | Converting Mixed and Improper <br> Mixed to Improper Improper to Mixed Comparing Fractions 2 Identifying fractions beyond 1 Mixed and Improper Numbers on a Number Line <br> What Mixed Number Is Shaded? | Grade 6 Fractions, Decimals and Percentages |

## New Brunswick Outcomes <br> Alignment with Mathletics

## Grade 6

| Strand | General Curriculum Outcome | Specific Curriculum Outcome | Outcome Description | \# Activities | $\square$ eBooks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number | Number | NB.6.N. 5 | Demonstrate an understanding of ratio, concretely, pictorially, and symbolically. | Fractions to Decimals <br> Fractions to Decimals 2 <br> Ratio <br> Ratios <br> Equivalent Ratios <br> Dividing a Quantity in a Ratio <br> Ratio Word Problems <br> Ratio and Proportion <br> Solve Proportions <br> Unitary Method <br> Best Buy <br> Simplify Ratios: 2 Whole Numbers | Under review |
| Number | Number | NB.6.N. 6 | Demonstrate an understanding of percent (limited to whole numbers), concretely, pictorially, and symbolically. | Calculating Percentages <br> Percent of a Number <br> Decimal to Percentage <br> Percents and Decimals <br> Percentage of a Quantity <br> Percents to Fractions <br> Percent Increase and Decrease <br> Percentage of a Quantity >100\% <br> Percentage Word Problems <br> Solve Percent Equations <br> Modelling Percentages <br> Match Decimals and Percentages <br> What Percentage? | Grade 6 <br> Fractions, Decimals and Percentages |
| Number | Number | NB.6.N. 7 | Demonstrate an understanding of integers, concretely, pictorially, and symbolically. | Integers: Add and Subtract <br> Add Integers <br> Ordering Integers <br> Comparing Integers <br> More with Integers <br> Integers on a Number Line <br> Ordering Integers (Number Line) <br> Integers: Order of Operations <br> (BEDMAS) <br> Order of Operations 1 (BEDMAS) <br> Integers: Subtraction <br> Subtract Integers | Grade 7 Directed Numbers |

## New Brunswick Outcomes <br> Alignment with Mathletics

## Grade 6

| Strand | General Curriculum Outcome | Specific Curriculum Outcome | Outcome Description | \# Activities | $\pm$ eBooks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number | Number | NB.6.N. 8 | Demonstrate an understanding of multiplication and division of decimals (1-Digit whole number multipliers and 1-Digit natural number divisors). | Multiply Decimals and Powers of 10 Multiply Decimals: 10, 100, 1000 Divide Decimals: 10, 100, 1000 Divide by Powers of 10 Divide Decimal by Whole Number Decimal by Whole Number Missing Values: Decimals Rounding Decimals 1 Rounding Decimals 2 Money Problems: Four Operations | Grade 6 Multiplication and Division |
| Number | Number | NB.6.N. 9 | Explain and apply the order of operations, excluding exponents, with and without technology (limited to whole numbers). | Integers: Order of Operations (BEDMAS) <br> Order of Operations 1: (BEDMAS) | Grade 7 <br> Directed <br> Numbers |
| Patterns and Relations | Patterms | NB.6.PR. 1 | Demonstrate an understanding of the relationships within tables of values to solve problems. | Table of Values <br> Find the Pattern Rule Find the Function Rule Pattern Rules and Tables Function Rules and Tables | Grade 6 <br> Patterns and Algebra |
| Patterns and Relations | Patterms | NB.6.PR. 2 | Represent and describe patterns and relationships using graphs and tables. | Ordered Pairs <br> Coordinate Graphs <br> Coordinate Graphs: 1st Quadrant Graphing from a Table of Values | Grade 6 <br> Position <br> Grade 7 <br> The Number Plane |
| Patterns and Relations | Variables and Equations | NB.6.PR. 3 | Represent generalizations arising from number relationships using equations with letter variables. | Commutative Property of Addition Multiplication Properties <br> Write an Equation: Word Problems <br> Writing Equations <br> Writing Algebraic Expressions <br> Solving Simple Equations <br> Missing Numbers: Variables <br> Magic Symbols 2 <br> Pyramid Puzzles 2 <br> Missing Values | Grade 6 <br> Patterns and Algebra |
| Patterns and Relations | Variables and Equations | NB.6.PR. 4 | Demonstrate and explain the meaning of preservation of equality concretely, pictorially and symbolically. | Writing Equations Writing Algebraic Expressions Write an Equation: Word Problems | Grade 6 <br> Patterns and Algebra |

## New Brunswick Outcomes <br> Alignment with Mathletics

## Grade 6

| Strand | General Curriculum Outcome | Specific Curriculum Outcome | Outcome Description | E Activities | $\square$ eBooks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Shape and Space | Measurement | NB.6.SS. 1 | Demonstrate an understanding of angles by: identifying examples of angles in the environment; classifying angles according to their measure; estimating the measure of angles using $45^{\circ}, 90^{\circ}$ and $180^{\circ}$ as reference angles; determining angle measures in degrees; drawing and labelling angles when the measure is specified. | Equal Angles <br> Comparing Angles <br> Classifying Angles <br> Measuring Angles <br> Estimating Angles <br> Labelling Angles <br> Triangles: Acute, Right, Obtuse | Grade 6 Geometry |
| Shape and Space | Measurement | NB.6.SS. 2 | Demonstrate that the sum of interior angles is: $180^{\circ}$ in a triangle; $360^{\circ}$ in a quadrilateral. | Angle Sum of a Triangle Angle Measures in a Triangle Angle Sum of a Quadrilateral Angles of Revolution: Unknown Angles | Grade 7 Angles and Polygons |
| Shape and Space | Measurement | NB.6.SS. 3 | Develop and apply a formula for determining the perimeter of polygons, area of rectangles and volume of right rectangular prisms. | Perimeter: Squares and <br> Rectangles <br> Perimeter: Composite Shapes <br> Perimeter Detectives 1 <br> Perimeter Detectives 2 <br> Perimeter: Triangles <br> Perimeter: Triangles 2 <br> Area: Squares and Rectangles <br> Area: Squares and Rectangles 1 <br> Area: Squares and Rectangles 2 <br> Volume: Rectangular Prisms 2 <br> Volume: Rectangular Prisms 1 | Grade 6 <br> Length, <br> Perimeter and <br> Area <br> Grade 6 <br> Volume, <br> Capacity and Mass |
| Shape and Space | 3-D Objects and 2-D Shapes | NB.6.SS. 4 | Construct and compare triangles, including: scalene; isosceles; equilateral; right; obtuse; and acute in different orientations. | Angle Sum of a Triangle Angle Measures in a Triangle | Grade 7 Angles and Polygons |
| Shape and Space | 3-D Objects and 2-D Shapes | NB.6.SS. 5 | Describe and compare the sides and angles of regular and irregular polygons. | Faces, Edges and Vertices Faces, Edges and Vertices 1 How Many Vertices? | Grade 6 Geometry |
| Shape and Space | Transformations | NB.6.SS. 6 | Perform a combination of transformations (translations, rotations, or reflections) on a single 2-D shape, with and without technology, and draw and describe the image. | Congruent Figures | Grade 6 Geometry |

## New Brunswick Outcomes <br> Alignment with Mathletics

## Grade 6

| Strand | General Curriculum Outcome | Specific Curriculum Outcome | Outcome Description | \# Activities | $\square$ eBooks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Shape and Space | Transformations | NB.6.SS. 7 | Perform a combination of successive transformations of 2-D shapes to create a design, and identify and describe the transformations. | Flip, Slide, Turn Transformations | Grade 6 Geometry |
| Shape and Space | Transformations | NB.6.SS. 8 | Identify and plot points in the first quadrant of a Cartesian plane using whole number ordered pairs. | Ordered Pairs Coordinate Graphs Coordinate Graphs: 1st Quadrant | Grade 6 <br> Position <br> Grade 7 The Number Plane |
| Shape and Space | Transformations | NB.6.SS. 9 | Perform and describe single transformations of a 2-D shape in the first quadrant of a Cartesian plane (limited to whole-number vertices). | Transformations: Coordinate Plane | Grade 6 <br> Position <br> Grade 7 The <br> Number Plane |
| Statistics and Probability | Data Analysis | NB.6.SP. 1 | Create, label, and interpret line graphs to draw conclusions. | Line Graphs: Interpretation | Grade 6 <br> Position <br> Grade 7 The Number Plane |
| Statistics and Probability | Data Analysis | NB.6.SP. 2 | Select, justify, and use appropriate methods of collecting data, including: questionnaires; experiments; databases; electronic media. | Data Types Data sampling | Grade 6 Data Representation |
| Statistics and Probability | Data Analysis | NB.6.SP. 3 | Graph collected data and analyze the graph to solve problems. | Pie Charts Circle Graphs Stem and Leaf Introduction Bar Graphs 1 Column Graphs Bar Graphs 2 Divided Bar Graphs Compound Bar Chart Stem-and-Leaf Plots | Grade 6 Data Representation |
| Statistics and Probability | Chance and Uncertainty | NB.6.SP. 4 | Demonstrate an understanding of probability by: identifying all possible outcomes of a probability experiment; differentiating between experimental and theoretical probability; determining the theoretical probability of outcomes in a probability experiment; determining the experimental probability of outcomes in a probability experiment; comparing experimental results with the theoretical probability for an experiment. | What are the Chances? <br> Will it Happen? <br> Probability Scale | Grade 6 Chance and Probability Grade 7 Chance |

## New Brunswick Outcomes <br> Alignment with Mathletics

## Grade 7

| Strand | General Curriculum Outcome | Specific Curriculum Outcome | Outcome Description | $\ldots$ Activities | DeBooks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number | Number | NB.7.N. 1 | Determine and explain why a number is divisible by 2,3 , $4,5,6,8,9$, or 10 , and why a number cannot be divided by 0 . | Divisibility Tests <br> Divisibility Tests $(2,5,10)$ <br> Divisibility Tests (3, 4, 9) <br> Product of Prime Factors <br> Factors <br> Tests of Divisibility 1 <br> Prime or Composite? <br> Greatest Common Factor | Grade 7 <br> Whole <br> Numbers |
| Number | Number | NB.7.N. 2 | Demonstrate an understanding of the addition, subtraction, multiplication, and division of decimals (for more than 1-Digit divisors or 2-digit multipliers, the use of technology is expected) to solve problems. | Adding Decimals <br> Add Decimals 2 <br> Subtract Decimals 1 <br> Decimal Complements <br> Subtract Decimals 2 <br> Multiply Decimals: 10, 100, 1000 <br> Divide Decimals: 10, 100, 1000 <br> Divide Decimal by Whole Number <br> Multiply Decimals and Powers of 10 <br> Missing Values: Decimals <br> Adding and Subtracting Decimals <br> Decimal by Whole Number <br> Decimal by Decimal <br> Divide Decimal by Decimal <br> Divide by Powers of 10 <br> Adding and Subtracting Decimals <br> Multiply Decimals: Area Model <br> Multiply Decimal by Decimal <br> Subtracting Decimals | Grade 7 Decimals |
| Number | Number | NB.7.N. 3 | Solve problems involving percents from $1 \%$ to $100 \%$. | Percentage Word Problems Percentage of a Quantity Percent Increase and Decrease Calculating Percentages Percent of a Number | Grade 7 <br> Percentage <br> Basics |
| Number | Number | NB.7.N. 4 | Demonstrate an understanding of the relationship between positive repeating decimals and positive fractions, and positive terminating decimals and positive fractions. | Fraction to Terminating Decimal Fractions to Decimals <br> Fractions to Decimals 2 <br> Recurring Decimals <br> Decimals to Fractions 1 <br> Decimals to Fractions 2 <br> Recurring Decimals and Series <br> Convert Decimals to Fractions 2 | Grade 7 <br> Percentage <br> Basics |

## New Brunswick Outcomes <br> Alignment with Mathletics

## Grade 7

| Strand | General Curriculum Outcome | Specific Curriculum Outcome | Outcome Description | \# Activities | $\square$ eBooks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number | Number | NB.7.N. 5 | Demonstrate an understanding of adding and subtracting positive fractions and mixed numbers, with like and unlike denominators, concretely, pictorially, and symbolically (limited to positive sums and differences). | Add: Common Denominator Add Mixed Numbers: Same Sign Add Like Mixed Numbers <br> Add Unlike Mixed Numbers <br> Mixed to Improper <br> Improper to Mixed <br> Subtract: Common Denominator <br> Subtract: No Common <br> Denominator <br> Subtract Unlike Mixed Numbers <br> Simplifying Fractions <br> Add: No Common Denominator <br> Add Unlike Fractions <br> Add subtract fractions 1 <br> Subtract Like Mixed Numbers <br> Subtract Unlike Fractions <br> One take Fraction <br> Subtract Mixed Numbers: <br> Renaming | Grade 7 <br> Fractions |
| Number | Number | NB.7.N. 6 | Demonstrate an understanding of addition and subtraction of integers, concretely, pictorially, and symbolically. | Integers: Add and Subtract <br> More with Integers <br> Add Integers <br> Subtract Integers <br> Negative or Positive? <br> Integers: Subtraction | Grade 7 Directed Numbers |
| Number | Number | NB.7.N. 7 | Compare and order positive fractions, positive decimals (to thousandths), and whole numbers by using; benchmarks; place value; equivalent fractions and/or decimals. | Comparing Fractions 1 <br> Comparing Fractions 1a <br> Comparing Fractions 1b <br> Comparing Fractions 2 <br> Compare Fractions 2 <br> Ordering Fractions 1 <br> Integers on a Number Line <br> Ordering Integers (Number Line) <br> Comparing Integers <br> Comparing Integers ( $<_{,}=,>$) <br> Decimal Order <br> Decimal Order 1 <br> Decimal Order 2 <br> Comparing Decimals <br> Comparing Decimals 1 <br> Comparing Decimals 2 | Grade 7 <br> Fractions Grade 7 Decimals |

## New Brunswick Outcomes <br> Alignment with Mathletics

## Grade 7

| Strand | General Curriculum Outcome | Specific Curriculum Outcome | Outcome Description | 12 Activities | $\square$ eBooks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Patterns and Relations | Patterns | NB.7.PR. 1 | Demonstrate an understanding of oral and written patterns and their equivalent linear relations. | Pattern Rules and Tables Find the Pattern Rule | Grade 8 <br> Linear <br> Relationships |
| Patterns and Relations | Patterns | NB.7.PR. 2 | Create a table of values from a linear relation, graph the table of values, and analyze the graph to draw conclusions and solve problems. | Pattern Rules and Tables <br> Table of Values <br> Find the Pattern Rule <br> Graphing from a Table of Values <br> Patterns, Rules and Equations <br> Ordered Pairs <br> Reading Values from a Line | Grade 7 <br> Algebra <br> Basics <br> Grade 8 <br> Linear <br> Relationships |
| Patterns and Relations | Variables and Equations | NB.7.PR. 3 | Demonstrate an understanding of preservation of equality by: modelling preservation of equality, concretely, pictorially, and symbolically; applying preservation of equality to solve equations. | Solve Equations: Add, Subtract 1 Solve Equations: Multiply, Divide 1 Solve Proportions Equations to Solve Problems Solving Simple Equations | Grade 7 <br> Algebra <br> Basics <br> Grade 8 <br> Linear <br> Relationships |
| Patterns and Relations | Variables and Equations | NB.7.PR. 4 | Explain the difference between an expression and an equation. | Write an Equation: Word Problems Writing Algebraic Expressions Writing Equations | Grade 7 <br> Algebra <br> Basics <br> Grade 8 <br> Linear <br> Relationships |
| Patterns and Relations | Variables and Equations | NB.7.PR. 5 | Evaluate an expression given the value of the variable(s). | Simple Substitution 1 | Grade 7 Algebra Basics |
| Patterns and Relations | Variables and Equations | NB.7.PR. 6 | Model and solve problems that can be represented by one-step linear equations of the form $x+a=b$, concretely, pictorially, and symbolically, where $a$ and $b$ are integers. | More Substitution in Formulae Solving More Equations <br> Solve Equations: Add, Subtract 2 <br> Solve Equations: Multiply, Divide 2 | Grade 8 Equations |
| Patterns and Relations | Variables and Equations | NB.7.PR. 7 | Model and solve problems that can be represented by linear equations. | Equations: Variables, Both Sides Solve Multi-Step Equations Equations with Fractions Solve Two-Step Equations Missing Numbers: Variables Equations with Decimals Equations to Solve Problems Checking Solutions Identifying errors in applying the order of operations Find the Mistake | Grade 8 Equations |

## New Brunswick Outcomes <br> Alignment with Mathletics

## Grade 7

| Strand | General Curriculum Outcome | Specific Curriculum Outcome | Outcome Description | \# Activities | $\square$ eBooks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Shape and Space | Measurement | NB.7.SS. 1 | Demonstrate an understanding of circles by: describing the relationships among radius, diameter, and circumference of circles; relating circumference to $p$; determining the sum of the central angle; constructing circles with a given radius or diameter; solving problems involving the radii, diameters and circumferences of circles. | Circle Terms Circumference: Circles Labelling Circles Identify Parts of Circles 1 Identify Parts of Circles 2 |  |
| Shape and Space | Measurement | NB.7.SS. 2 | Develop and apply a formula for determining the area of triangles, parallelograms and circles. | Area: Triangles <br> Area: Right Angled Triangles <br> Area: Quadrilaterals <br> Area: Circles <br> Area: Parallelograms | Grade 7 Area and Perimeter |
| Shape and Space | 3-D objects and 2-D shapes | NB.7.SS. 3 | Perform geometric constructions, including perpendicular line segments, parallel line segments, perpendicular bisectors and angle bisectors. | Parallel Lines <br> What Line Am I? | Grade 7 The Number Plane |
| Shape and Space | Transformations | NB.7.SS. 4 | Identify and plot points in the four quadrants of a Cartesian plane using integral ordered pairs. | Ordered Pairs | Grade 7 The Number Plane |
| Shape and Space | Transformations | NB.7.SS. 5 | Perform and describe transformations (translations, rotations or reflections) of a 2-D shape in all four quadrants of a Cartesian plane (limited to integral number vertices). | Transformations <br> Rotations: Coordinate Plane <br> Transformations: Coordinate Plane <br> Flip, Slide, Turn <br> Symmetry <br> Symmetry or Not? <br> Rotational Symmetry <br> Vertical and horizontal shift | Grade 7 The Number Plane Grade 8 Straight Lines |
| Statistics and Probability | Data Analysis | NB.7.SP. 1 | Demonstrate an understanding of central tendency and range by determining the measures of central tendency (mean, median, mode) and range and determining the most appropriate measures of central tendency to report findings. | Mean <br> Median <br> Mode <br> Mean from Frequency Table <br> Median from Frequency <br> Mode from Frequency Table Grouped Frequency | Grade 7 Data for Statistics |

## New Brunswick Outcomes <br> Alignment with Mathletics

## Grade 7

| Strand | General Curriculum Outcome | Specific Curriculum Outcome | Outcome Description | EActivities | eBooks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Statistics and Probability | Data Analysis | NB.7.SP. 2 | Determine the effect on the mean, median, and mode when an outlier is included in the data. | Under review | Grade 7 Data for Statistics |
| Statistics and Probability | Data Analysis | NB.7.SP. 3 | Construct, label, and interpret circle graphs to solve problems. | Creating a Sector Graph Sector Graph Calculations Sector Graph Angles Sector Graphs | Grade 6 Data Representation |
| Statistics and Probability | Chance and Uncertainty | NB.7.SP. 4 | Express probabilities as ratios, fractions, and percents. | Probability Scale Ratios Simple Probability Find the Probability | Grade 7 Chance |
| Statistics and Probability | Chance and Uncertainty | NB.7.SP. 5 | Identify the sample space (where the combined sample space has 36 or fewer elements) for a probability experiment involving two independent events. | Dice and Coins <br> Two-way Table Probability <br> Tree Diagrams <br> Venn Diagrams | Grade 7 Chance |
| Statistics and Probability | Chance and Uncertainty | NB.7.SP. 6 | Conduct a probability experiment to compare the theoretical probability (determined using a tree diagram, table, or another graphic organizer) and experimental probability of two independent events. | Dice and Coins <br> Two-way Table Probability <br> Probability Tables <br> Probability With Replacement <br> Probability Without Replacement <br> Complementary Events | Grade 7 Chance |

## New Brunswick Outcomes <br> Alignment with Mathletics

Grade 8

| Strand | General Curriculum Outcome | Specific Curriculum Outcome | Outcome Description | 1 Activities | $\square$ eBooks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number | Number | NB.8.N. 1 | Demonstrate an understanding of perfect squares and square roots, concretely, pictorially, and symbolically (limited to whole numbers). | Square Roots <br> Equations with Square Roots Square and Cube Roots | Under review |
| Number | Number | NB.8.N. 2 | Determine the approximate square root of numbers that are not perfect squares (limited to whole numbers). | Estimating Square Roots Estimate Square Roots | Under review |
| Number | Number | NB.8.N. 3 | Demonstrate an understanding of percents greater than or equal to 0\%. | Percentage of a Quantity Calculating Percentages Calculating Percentages 1 Percentage to Fraction Decimal to Percentage Percents and Decimals Percentage Word Problems <br> Percentage Increase and Decrease <br> Percentage of a Quantity Solve Percent Equations <br> Percentage Composition <br> Percentages of a quantity (>100\% <br> Percent of a Number (Mental) Quantities to Percentages (with units) | Grade 8 Percentage Calculations |
| Number | Number | NB.8.N. 4 | Demonstrate an understanding of ratio and rate. | Equivalent Ratios <br> Dividing a Quantity in a Ratio <br> Ratio Word Problems <br> Solve Proportions <br> Rate Word Problems <br> Ratios <br> Rates <br> Rates Word Problems <br> Rates Calculations <br> Ratio and Proportion <br> Simplify Ratios: 2 Whole Numbers <br> Simplify Ratios: 3 Whole Numbers <br> Simplify Ratios: Mixed Numbers | Grade 8 Rates and Ratios |
| Number | Number | NB.8.N. 5 | Solve problems that involve rates, ratios, and proportional reasoning. | Ratio Word Problems Rate Word Problems Rates Calculations | Grade 7 <br> Fractions |

## New Brunswick Outcomes <br> Alignment with Mathletics

## Grade 8

| Strand | General Curriculum Outcome | Specific Curriculum Outcome | Outcome Description | \# Activities | ]eBooks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number | Number | NB.8.N. 6 | Demonstrate an understanding of multiplying and dividing positive fractions and mixed numbers, concretely, pictorially, and symbolically. | Operations with Fractions Converting Mixed and Improper Model fractions to multiply Multiply Mixed Numbers Divide Fractions by Fractions 1 Divide Fractions by Fractions 2 Divide Mixed Numbers Fraction Word Problems Divide by a unit fraction Divide Fractions Visual Model Multiplying Fractions Multiply Two Fractions 1 Multiply Two Fractions 2 | Grade 7 <br> Fractions |
| Number | Number | NB.8.N. 7 | Demonstrate an understanding of multiplication and division of integers, concretely, pictorially, and symbolically. | Integers: Multiply and Divide Integers: Multiply and Divide 1 Multiplying and Dividing Integers Integers: Order of Operations (BEDMAS) <br> More with Integers <br> Order of Operations 1 (BEDMAS) | Grade 7 Whole Numbers |
| Patterns and Relations | Patterns | NB.8.PR. 1 | Graph and analyze twovariable linear relations. | Pattern Rules and Tables <br> Find the Pattern Rule <br> Find the Function Rule <br> Ordered Pairs <br> Table of Values <br> Reading Values from a Line <br> Graphing from a Table of Values 2 $y=a x$ <br> Which Straight Line? <br> Equation of a Line 2 | Grade 8 Linear Relationships |
| Patterns and Relations | Variables and Equations | NB.8.PR. 2 | Model and solve problems using linear equations. | Equations to Solve Problems <br> Solving More Equations <br> Solve Equations: Add, Subtract 2 <br> Solve Equations: Multiply, Divide 2 <br> Equations with Fractions <br> Equations with Grouping Symbols | Grade 8 Equations |
| Shape and Space | Measurement | NB.8.SS. 1 | Develop and apply the Pythagorean theorem to solve problems. | Pythagoras' Theorem Pythagorean Triads Hypotenuse of a Right Triangle Find Slant Height | Grade 8 Pythagoras' Theorem |
| Shape and Space | Measurement | NB.8.SS. 2 | Draw and construct nets for 3-D objects. | Nets | Grade 9 Measuring Solids |

## New Brunswick Outcomes <br> Alignment with Mathletics

## Grade 8

| Strand | General Curriculum Outcome | Specific Curriculum Outcome | Outcome Description | \# Activities | ]eBooks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Shape and Space | Measurement | NB.8.SS. 3 | Determine the surface area of right rectangular prisms, right triangular prisms and right cylinders to solve problems. | Surface Area: Cylinders Surface Area: Triangular Prisms <br> Surface Area: Rectangular Prisms | Grade 9 Measuring Solids |
| Shape and Space | Measurement | NB.8.SS. 4 | Develop and apply formulas for determining the volume of right prisms and right cylinders. | Volume: Cylinders <br> Volume: Prisms <br> Volume: Rectangular Prisms 2 <br> Volume: Triangular Prisms | Grade 9 Measuring Solids |
| Shape and Space | 3-D Objects and 2-D Shapes | NB.8.SS. 5 | Draw and interpret top, front, and side views of 3-D objects composed of right rectangular prisms. | Under Review | Grade 8 Constructions |
| Shape and Space | Transformations | NB.8.SS. 6 | Demonstrate an understanding of tessellation by explaining the properties of shapes that make tessellating possible, creating tessellations, identifying tessellations in the environment. | Under Review | Grade 6 Geometry |
| Statistics and Probability | Data Analysis | NB.8.SP. 1 | Critique ways in which data are presented. | Frequency Histograms Histograms Histogram or Polygon? Cumulative Frequency Histogram Dot Plots Line Plots Pie Charts Divided Bar Graphs Step Graphs | Grade 6 Data Representation Grade 9 Data |
| Statistics and Probability | Chance and Uncertainty | NB.8.SP. 2 | Solve problems involving the probability of independent events. | Dice and Coins <br> Probability Scale <br> Simple Probability <br> Two-way Table Probability <br> Probability With Replacement <br> Probability Without <br> Replacement <br> Probability Without <br> Replacement 1 <br> Simple Probability 1 <br> Probability Tables <br> Probability with Replacement 1 <br> Find the Probability | Grade 7 Chance <br> Grade 8 <br> Probability |

## Mathletics

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